

**What is claimed is:**

1. An optical information-recording medium, comprising a dye having at least two chromophores bonded to each other without any conjugated bond intervening between said chromophores.

2. An optical information-recording medium as described in claim 1, having a thickness of  $1.2\pm0.2$  mm and comprising two laminates each containing a recording layer including the dye, in which the two laminates are bonded each other so that each of the recording layers is inside,

wherein each of the laminates includes:

a transparent disk-shape substrate having a pregroove formed with a track pitch of 0.6 to 0.9  $\mu\text{m}$  and measuring one of  $120\pm3$  mm and  $80\pm3$  mm in diameter and  $0.6\pm0.1$  mm in thickness; and

the recording layer provided on the pregroove-formed side of the transparent disk-shape substrate.

3. An optical information-recording medium as described in claim 1, having a thickness of  $1.2\pm0.2$  mm,

the optical information-recording medium comprising:

a laminate containing a recording layer including the dye; and

a disk-shape protective plate;

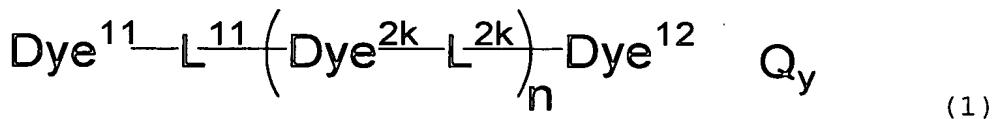
in which the laminate and the disk-shape protective plate

are bonded each other so that the recording layer is inside, wherein the laminate includes:

a transparent disk-shape substrate having a pregroove formed with a track pitch of 0.6 to 0.9  $\mu\text{m}$  and measuring one of  $120\pm3$  mm and  $80\pm3$  mm in diameter and  $0.6\pm0.1$  mm in thickness; and

the recording layer provided on the pregroove-formed side of the transparent disk-shape substrate.

4. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (1):



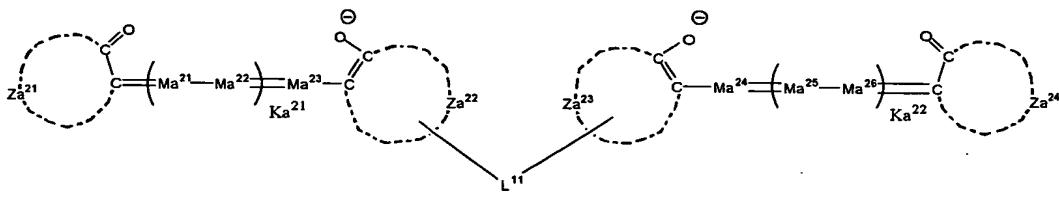
wherein  $\text{Dye}^{11}$ ,  $\text{Dye}^{12}$  and  $\text{Dye}^{2k}$  each independently represents a dye residue having a chromophore,  $\text{L}^{11}$  and  $\text{L}^{2k}$  each independently represent a divalent linkage group forming no  $\pi$ -conjugated system between chromophores linked thereby,  $n$  represents an integer of 0 to 10,  $k$  represents all integers in the 0 to  $n$  range,  $Q$  represents an ion neutralizing electric charge, and  $y$  is a number required for neutralization of electric charge.

5. An optical information-recording medium as described in claim 4, wherein the chromophore forming the dye residue

represented by any of Dye<sup>11</sup>, Dye<sup>12</sup> and Dye<sup>2k</sup> is at least one of cyanine dyes, merocyanine dyes and oxonol dyes.

6. An optical information-recording medium as described in claim 4, wherein all the chromophores forming the dye residues represented by Dye<sup>11</sup>, Dye<sup>12</sup> and Dye<sup>2k</sup> are oxonol dyes.

7. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (6):



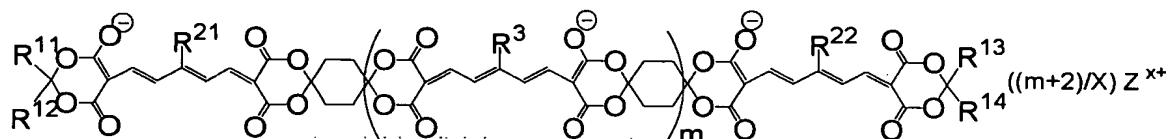
• 2 Q

(6)

wherein Za<sup>21</sup>, Za<sup>22</sup>, Za<sup>23</sup> and Za<sup>24</sup> each independently represent atoms forming an acidic nucleus, Ma<sup>21</sup>, Ma<sup>22</sup>, Ma<sup>23</sup>, Ma<sup>24</sup>, Ma<sup>25</sup> and Ma<sup>26</sup> each independently represent a substituted or unsubstituted methine group, L<sup>11</sup> is a divalent linkage group forming no  $\pi$ -conjugated system together with its two bonds, Ka<sup>21</sup> and Ka<sup>22</sup> each independently represent an integer of 0 to 3, and Q represents a univalent cation for neutralizing electric charge, or 2Q represents a divalent cation; and Ma<sup>21</sup>s, Ma<sup>22</sup>s, Ma<sup>25</sup>s and Ma<sup>26</sup>s present in a case where Ka<sup>21</sup> and Ka<sup>22</sup> are each 2 or 3 may be the

same or different.

8. An optical information-recording medium as described in claim 1, wherein the dye is represented by the following formula (2):

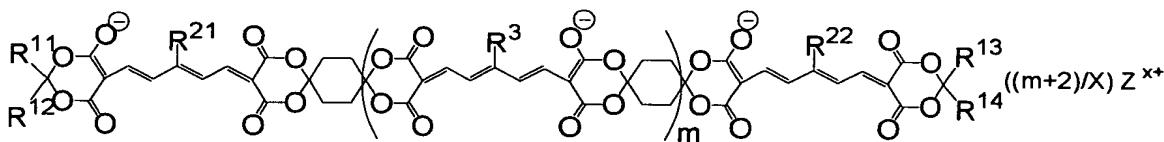


(2)

wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group,  $R^{21}$ ,  $R^{22}$  and  $R^3$  each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aryloxy group, a substituted or unsubstituted heterocyclic group, a halogen atom, a carboxyl group, a substituted or unsubstituted alkoxy carbonyl group, a cyano group, a substituted or unsubstituted acyl group, a substituted or unsubstituted carbamoyl group, an amino group, a substituted amino group, a sulfo group, a hydroxyl group, a nitro group, a substituted or unsubstituted alkylsulfonyl amino group, a substituted or unsubstituted arylsulfonyl amino group, a substituted or unsubstituted carbamoyl amino group, a

substituted or unsubstituted alkylsulfonyl group, a substituted or unsubstituted arylsulfonyl group, a substituted or unsubstituted alkylsulfinyl group, a substituted or unsubstituted arylsulfinyl group or a substituted or unsubstituted sulfamoyl group,  $m$  represents an integer of 0 or more,  $R^3$ 's may be the same or different when  $m$  is 2 or more,  $Z^{x+}$  represents a cation, and  $x$  represents an integer of 1 or more.

9. An oxonol compound represented by the following formula (2):



(2)

wherein  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group,  $R^{21}$ ,  $R^{22}$  and  $R^3$  each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aryloxy group, a substituted or unsubstituted heterocyclic group, a halogen atom, a carboxyl group, a substituted or unsubstituted alkoxy carbonyl group, a cyano group, a substituted or unsubstituted acyl group, a substituted or

unsubstituted carbamoyl group, an amino group, a substituted amino group, a sulfo group, a hydroxyl group, a nitro group, a substituted or unsubstituted alkylsulfonylamino group, a substituted or unsubstituted arylsulfonylamino group, a substituted or unsubstituted carbamoylamino group, a substituted or unsubstituted alkylsulfonyl group, a substituted or unsubstituted arylsulfonyl group, a substituted or unsubstituted alkylsulfinyl group, a substituted or unsubstituted arylsulfinyl group or a substituted or unsubstituted sulfamoyl group,  $m$  represents an integer of 0 or more,  $R^3$ 's may be the same or different when  $m$  is 2 or more,  $Z^{x+}$  represents a cation, and  $x$  represents an integer of 1 or more.

10. A method of recording information comprising recording information on an optical information-recording medium as described in claim 1 by irradiation with laser light having a wavelength of 600 to 700 nm.

11. A method of recording information comprising recording information on an optical information-recording medium as described in claim 2 by irradiation with laser light having a wavelength of 600 to 700 nm.

12. A method of recording information comprising recording information on an optical information-recording

medium as described in claim 3 by irradiation with laser light having a wavelength of 600 to 700 nm.

13. A method of recording information comprising recording information on an optical information-recording medium as described in claim 4 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

14. A method of recording information comprising recording information on an optical information-recording medium as described in claim 5 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

15. A method of recording information comprising recording information on an optical information-recording medium as described in claim 6 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

16. A method of recording information comprising recording information on an optical information-recording medium as described in claim 7 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.

17. A method of recording information comprising recording information on an optical information-recording

medium as described in claim 8 by irradiation with laser light having a wavelength in the range of 600 to 700 nm.